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CPY - KOCH-N

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IC - C12M1/38

IN - HONG S I; KIM S U; LEE D H; LEE S H; YOON C S

MC - D05-A03 D05-A04C

PA - (KOCHE-N) KOREA CHUNGANG EDUCATIONAL FOUND

PN - KR2004015894 A 20040221 DW200440 C12M1/38 001pp

PR - KR20020048036 20020814

XA - C2004-160505

XIC - C12M-001/38

AB - KR2004015894 NOVELTY - A packed-bed bioreactor for producing high concentration spores through solid cultivation and a culturing method using the same are provided, thereby inhibiting the reduction of microorganism growth area, prevention of ventilation, and accumulation of metabolism heat, and consequently producing high concentration spores over the bioreactor.

- DETAILED DESCRIPTION - A packed-bed bioreactor for producing high concentration spores through solid cultivation comprises a housing(15) with an air inlet(11) in its lower part and an air outlet(12) in its upper part; two sieves(13, 14) installed in the inner lower part of the housing for supporting a solid medium; the solid medium packed in the upper part of the sieves for supplying a habitat of microorganisms; a plurality of thermocouples(18, 19, 20, 21, 22, 23, 24, 25) installed in the inner side wall and upper wall of the housing for detecting the inner temperature of the solid medium; and a jacket(16) using a water bath(17) installed along the outer wall of the housing for controlling the inner temperature of the housing.

- (Dwg.1/10)

IW - PACK BED PRODUCE HIGH CONCENTRATE SPORE THROUGH SOLID CULTIVATE CULTURE METHOD

IKW - PACK BED PRODUCE HIGH CONCENTRATE SPORE THROUGH SOLID CULTIVATE CULTURE METHOD

INW - HONG S I; KIM S U; LEE D H; LEE S H; YOON C S

NC - 001

OPD - 2002-08-14

ORD - 2004-02-21

PAW - (KOCHE-N) KOREA CHUNGANG EDUCATIONAL FOUND

TI - Packed-bed bioreactor for producing high concentration spores through solid cultivation and culturing method the same